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ABSTRACT

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STUDENT POWERED SURVEY RESEARCH: THE CONSTRAINTS, LIMITATIONS AND PAYOFFS

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ABSTRACT

"Student powered" research, defined as a comprehensive reliance on, or involvement of, students as research "staff" members in all or most phases of a serious research effort, is discussed. It is suggested that there are several conditions which are necessary for student powered mail survey questionnaire research projects to be initiated, that there are various possible permutations of the conditions, and that the specific permutations affect: 1) the nature of the research, 2) the methods employed, 3) the problems encountered, 4) the benefit student researchers derive, and 5) the quality of the data. Conditions discussed are project sponsorship or impetus, availability and characteristics of student power, logistic feasibility, and administrative sanction. A comparison of the conditions as they existed at three universities (Northwestern, Northeastern Illinois, and the University of Chicago) is made, and the effects of the respective conditions on each of the student powered research projects are reviewed.

Some student involvement in the research efforts of academicians is common at most colleges and universities. Students, usually undergraduates or entry-level graduate students, are assigned to individual faculty members who parcel out tasks and assignments with an expectation of realizing a saving of time and energy through their assistants' efforts. Generally, there is a clear understanding that the research interests of the faculty member are primary and assistance will be provided accordingly. Such research activities might be considered to be student "aided."

This paper discusses the situation in which research is student "powered." Student powered research may be characterized by a comprehensive reliance on, or involvement of, students as research "staff" members in all or most phases of a serious research effort. Under such circumstances, students are encouraged and expected to assume active roles as equally contributing members of a team rather than passive roles as assistants with an assigned task to perform. They are expected to participate in the full range of project activities rather than fragmentary portions of it. It is further expected that the research process and results will be "the real thing" rather than merely an academic exercise--although there is a recognition on the part of everyone involved that there is to be a learning outcome derived. Learning how to do social research by participating in one, relatively large study can be contrasted not only with student "aided" research but also with the situation in which students go through a series of usually self-contained small research projects designed to illustrated

different methodologies and different sociological concepts in action. (See for example, Clifton, 1976; Straus and Nelson, 1968; Wiseman and Aron, 1970; and Gamson, 1978). It can also be contrasted with the situation (which might be called simply student research) in which one student pursues his or her research project alone under the supervision of a professor in order to write a thesis or paper. Active participation and responsibility within a "real" research project and team work are the characteristics distinguishing student powered research as we define it here.

Preconditions of Student-Powered Research

When the research is "powered" by students, the dynamics of the research process, the substantive results and the nature of the interpersonal relationships of participants tend to differ from the processes, results and relationships associated with student-aided or student research efforts. Differences tend to be both quantitative and qualitative. For instance, student powered projects tend to involve all individuals enrolled in a given course, and the greater involvement of a greater number of individuals, particularly during data collection and processing,may permit a large-scale research project to be undertaken. However, the greater involvement of a greater number of individuals in conceptualization and design processes will require a substantial amount of compromise and negotiation which may be expected to have an impact on interpersonal relationships as well as affect the substance of a survey instrument or interview schedule.

There are several conditions that are necessary for student powered research projects to be initiated. It also seems that there

are various permutations of the conditions, and that the specific permutations affect and are affected by the nature of the research, the methods employed, the problems encountered, and the outcome in terms of the participants' experience and the substantive product.

An essential condition is some impetus for launching a research project for which students specifically are to be a key ingredient. Though it is not always the case, more often than not, such impetus is provided by a faculty sponsor. The sponsor's motivation might be a personal interest in infusing coursework with new appeal by offering students an opportunity to integrate classroom theory with practical application. The sponsor's motivation might be a practical need for a relatively inexpensive staff, and who but students are more likely candidates? Whoever the sponsor, whatever the motivation, obviously the condition of impetus must be met. The specifics of who meets it and for what reasons may vary, however, and the variations may be expected to have a bearing on the project.

The condition which is sine qua non is the availability of "power," i.e., students, although the quantity and quality of power may vary. Student power may be provided by volunteers from a variety of disciplines or by a more homogeneous group of students all taking a required major course. Students may bring substantial skills and strong scholastic backgrounds to the project or may be unprepared to perform more than clerical tasks. They may be enthusiastic about participating or consider involvement yet another academic cross to be borne. A large number of students can provide a significant source of power. However, a large number of students can also provide a significant source of problems

ranging from locating a meeting place large enough to accommodate everyone to conflicts between factions which might develop over various issues within the group as a whole.

Another condition is that the project be possible from the standpoint of logistics. There must be a method by which student power can be "harnessed." If a course is to be used as the organizational framework for the participation of student researchers, attention must be given to the careful scheduling (if not limiting) of research activities in such a way as to ensure that the duration of the course is adequate for the completion of tasks to be undertaken. There must be a promise or hope of funding to cover expenses for services that cannot be provided by students and funding for commodities that cannot be acquired through donations or whose costs cannot be otherwise absorbed. There has to be some place that student researchers can call "home"--a place where survey materials can be kept safe and undisturbed, a place where tasks such as envelope stuffing can be done. If students are to participate in data processing activities, there must be access to keypunching equipment and computer facilities.

A final condition is administrative sanction if the project is to be undertaken within the context of an academic institution. The sanction may be manifest as active encouragement and support, benign acquiescence, or even a resistant tolerance, but must be given if the institution or individuals under its auspices are to be either explicitly or implicitly associated with the research project.

This paper offers a comparison of three research projects powered primarily by undergraduate students directed by the authors at their

respective universities. Chronologically, the "Survey of Undergraduate Life" at Northwestern University was the first of the three to be conducted and was undertaken during the 1976-1977 academic year. The second, "Survey of Undergraduate Students," was conducted during the 1978-79 academic year at Northeastern Illinois University; and the third, "Survey of Undergraduate Students, Present and Former," was conducted during the 1979 Winter and Spring quarters in the undergraduate College of the University of Chicago. The three studies, which all involved fairly lengthy questionnaires mailed to relatively large probability samples, were "of the students" (those sampled were undergraduate students); "by the students" (the research staffs were composed of undergraduate students); and "for the students" (to the extent that student researchers were expected to derive primary benefit from their involvement in the research process, although in one case, the "staff" were not in a formal methods course, but rather taking an independent study). The details of the three surveys are shown in Figure 1 and discussed in Suelzle, et al. (1980). The results of the studies, though used by some students for coursework assignments, were not intended for the exclusive use of students. Indeed, it was anticipated that findings would contribute to the existing data pools at each of the universities and provide some new insight to the characteristics of the respective undergraduate populations. Though the three projects were similar in many respects, there were differences in processes and outcomes which resulted from the distinctive conditions brought to bear on each.[1]

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[1]The students here were principally undergraduates. See Babbie, 1973, Chapter 11, for another account of an undergraduate student-powered survey of students. Of course, graduate students can also provide student power as in the Detroit Area Surveys. See Hammond, 1964, for other histories of student-aided and powered research.

Figure 1	Northwestern University "Survey of Undergraduate Life"	Northeastern Illinois University "Survey of Undergraduate Students"	University of Chicago "Survey of Undergraduate Students, Present and Former"
Organizational structure of project	2-quarter course sequence in research methodology offered by Department of Sociology	Independent study in Sociology	2-quarter sequence in research methodology offered by Public Affairs Program
Student researchers	Juniors and seniors; various majors: Journalism, Education, Sociology	Seniors; various majors: Sociology primarily but also Business	Juniors; Public Affairs Program
Preparation for project involvement	First quarter on secondary data analysis offered by Sociology	Previous term of research methods offered by Sociology	Previous course in statistics and data analysis (Not all students met prerequisite, however
When data collected	Winter, 1977 quarter (10 week term)	Winter, 1979 trimester (16 week term)	Spring, 1979 quarter (10 week term)
How data coded	By students and R.A.	By students	By students
How data keypunched	By students and R.A.	By university services	By NORC personnel
Number of student researchers	Twenty-one	Nine	Fifteen
Method of questionnaire distribution	Hand-delivered by student researchers to on-campus students; mailed 1st class to off-campus students	Mailed 3rd class	Mailed 1st class
Method of questionnaire return	Campus mail for campus students; return 1st class, postage provided, for off-campus students	Returned by students to on-campus drop boxes	Return 1st class postage provided
Expenses excluding all personnel expenses	$778.	$544.	$1,254.
Cost per sampled case (expenses of printing, supplies and postage)	$1.48	$0.95	$1.65

Figure 1 (Cont.)	Northwestern University "Survey of Undergraduate Life"	Northeastern Illinois University "Survey of Undergraduate Students"	University of Chicago "Survey of Undergraduate Students, Present and Former"
Method of followup	Personal contact by phone at the end of the Winter quarter; followup letter and second questionnaire during the Spring quarter	Postcard approximately one month after initial questionnaire distribution; no personal contact, no second questionnaire	Followup letter and second questionnaire approximately 2 weeks after initial questionnaire distribution
Source of funding	Northwestern University's Research Committee	Discretionary funds of Dean of Arts and Sciences	University Survey Research Committee
Project Director	Faculty member in Sociology Department	Undergraduate student with individualized major in "Survey Research"	Senior Study Director at NORC with teaching assignments
Questionnaire	40 pages, multilithed, good quality bond; both sides printed; collated and stapled	31 pages, multilithed, good quality bond; printed on both sides; assembled in booklet form with cover	37 pages, multilithed, good quality bond, printed both sides; assembled in booklet form with standard NORC cover
Sample	Systematic, random start	Systematic, random start	Systematic, random start
To whom questionnaire sent	150 blacks (of 635 registered) 375 non-blacks (of 6,005 registered)	570 (of 5,722 currently enrolled undergraduates who had received grades in the fall term)	509 (of 2,550 enrolled) 250 (the universe of students withdrawn, 1978)
Response rate	51.3% of black subsample 66.1% of non-black subsample	40%	57.9% of enrolled students 34.8% of withdrawn students
Student activities	Item development Item critiquing Item selection Collating, stapling Envelope stuffing Telephone followup Coding Keypunching data	Item critiquing Envelope stuffing Monitoring returns Coding Collecting returned questionnaires	Item development Item critiquing Item selection Envelope stuffing Coding Analysis Report writing

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Impetus

The Northwestern survey was initiated by Marijean Suelzle, a member of the Sociology Department faculty. The project was modeled after the 1970 "Social Attitude Survey of Students" at the University of California (Berkeley) on which Suelzle had worked as a teaching assistant. The Northwestern study was informed primarily by the same motives as the Berkeley study, i.e., an interest in improving the quality of teaching undergraduate research methodology courses. However, a parallel interest was that of using the data to conduct basic research on the effects of particular university institutional structures on life-course outcomes. Although various administrative offices at Northwestern had undertaken studies of students over the years, and although a number of reports had been issued suggesting innovations that would make institutional structures at Northwestern more responsive to the needs of undergraduate students, there was a paucity of systematic information on the responses of students to institutional structures. Accordingly, a greater attention was paid to the particular institutional features of Northwestern than was true of the Berkely survey. Suelzle conceived her role to be that of facilitator and consultant with a strong commitment to pedagogical concerns as well as basic research interests.

The Northeastern Illinois project was initiated by Melody Singleton, a part-time undergraduate student at Northeastern Illinois, who also had a full-time appointment as an administrative assistant in an academic department. Having previously taken advantage of inter-university co-operative arrangements through which she served as an intern with Suelzle on an unrelated project, Singleton initiated the Northeastern Illinois

study to meet the requirement for a field experience component for her individualized major in "Survey Research." Although the project did satisfy a program requirement, the motivation for undertaking a survey of undergraduate students specifically was the interest Singleton shared with faculty and administrators in student attitudes--particularly those regarding student perception of institutional goals and objectives. The project as originally conceived was to have been a replication of the Northwestern study. However, financial and personnel resources available at Northeastern Illinois were not sufficient to permit exact replication of the methods used at Northwestern. Furthermore, because many of the university-related experiences of students at Northeastern Illinois (which is a commuter school) differ from those of students at Northwestern (primarily a residential school), some sections of the Northwestern survey instrument were not applicable to Northeastern Illinois students. However, the Northeastern Illinois survey was closely modeled after the Northwestern study, and the Northwestern research design was, for the most part, merely adapted to Northeastern Illinois. Singleton's role was primarily that of a coordinator whose efforts were directed at implementing the project. Her responsibility was the coordination of all activities directly related to the preparation for and supervision of data collection. Ensuring the learning outcomes of student researchers (beyond that which was experientially provided by involvement in project activities) was a responsibility assumed by a Northeastern Illinois faculty member who agreed to cooperate to that end.

General conceptualization for the University of Chicago study resulted from the collaboration of personnel at NORC (National Opinion

Research Center) and the Public Affairs Program who had been struck by the lack of data with which administrators could work. The policy-oriented research question of how effective policy could be made without a firm knowledge of the dimensions of undergraduate life was raised and seemed an ideal topic of inquiry for students in the Public Affairs Program. There was also an interest in integrating NORC activities to a greater extent with other university activities and in furthering the teaching of suvey research. Rachel Rosenfeld, a senior study director at NORC with a background in teaching methodology courses, agreed to direct the project. The survey was originally to have focused on reasons for withdrawing from the university. After students did open-ended interviews with university administrators and student leaders, however, they decided to widen the focus to a more general study of "satisfaction" with the university on various dimensions. The objective of the project was to provide data that would actually aid administrators in policy decisions as well as to provide Public Affairs students with an opportunity to become familiar with various aspects of policy research. Rosenfeld conceived her role to be that of a teacher as well as a professional staff worker appointed as principal investigator. Though she placed a strong emphasis on professionalism and quality, the emphasis stemmed as much from a pedagogical concern for acquainting students with what was expected of professional researchers as from a desire to collect "good," i.e., usable, data.

The impetus for the Northwestern project was a faculty member within an academic department whose motivation was to enhance required coursework and to conduct basic research. The impetus for the Northeastern

Illinois project was an undergraduate student (and a university staff member) whose motivation was to meet personal academic requirements and to contribute as a member of the university community to the existing data on undergraduate students at Northeastern Illinois. If not the initial impetus, the sustaining force of the Chicago project was a research center senior study director whose motivation was to give undergraduates practical experience with professional research methods as well as to contribute data to aid in policy decisions at the university. Who initiated each of the student powered projects and why they did had an impact on various processes employed and outcomes derived. The effect that impetus can have can be illustrated by a consideration of the final formats and content of questions used for each of the three projects.

The Northwestern project director was more concerned that the student researchers perceive the questionnaire as "theirs" and the procedures in developing it as "fair" than she was in creating a professional instrument in terms of appearance. It was her intent to use democratic decision-making processes to teach students the consequences of decision-making. Thus, a substantial amount of the student researchers' efforts were directed toward questionnaire design activities such as basic questionnaire organization, item development, item critiquing, and final item selection. No control was exercised over the substantive content of the items themselves. Active involvement of students in questionnaire design also resulted in overcrowded pages--the only alternative to eliminating a large number of items, all of which one student or another was prepared to go to the barricades over in order that it be included. The format of the Northwestern questionnaire, therefore, was the most "amatureish." Active student involvement also required significant effort on the part of

the project director in establishing and maintaining "ground rules" to ensure equitable treatment of all participants' contribution.

The Northeastern Illinois project directors's primary concern was for the overall coordination and expeditious implementation of survey activities rather than the learning outcomes of student researchers, and therefore she assumed responsibility for both the substantive content and the format of the final questionnaire. The project director, primarily because of time and resource constraints, made unilateral decisions concerning items to be included, the relative amount of space to be devoted to each section of the questionnaire, section organization, overall length, and page layout. Though student researchers' suggestions were solicited and incorporated if practical, their contributions to the final questionnaire were quite limited. Though the process was far from democratic, it was efficient. Though the opportunity to participate in questionnaire design was negligible for the student researchers, it was optimal for the project director--who, it will be remembered, was also a student.

At the University of Chicago, the concern of the project director for students' learning experience coupled with the resources of NORC allowed for a rather comprehensive involvement of students in questionnaire development while at the same time a professional appearance of the final instrument. Student researchers developed a pool of questionnaire items and ultimtely decided (with very little restraint on the part of the project director) which items would be included in the final questionnaire. Though students did make general recommendations for

questionnaire organization, the final format was developed by professionals at NORC. A senior survey director, coding supervisor, and Word Processing Center personnel contributed their expertise in support of project efforts and produced a survey instrument of professional appearances.

The impetus for a student powered research project makes a difference. The motivation of, and the resources available to, whoever provides the impetus affects project outcomes--in terms of what students experience and learn as well as outcomes in terms of product, e.g., the survey instrument. If the impetus comes from a concern for the learning experience of student researchers, the project director is more likely to trade off some quality of product in favor of increased student involvement. If the impetus emanates primarily from a need for a work force, student activities will probably be chanelled in such a way that there is greater emphasis on accomplishing assigned tasks than on broader learning experience. If the impetus evolves from an interest in providing students with an academic learning experience coupled with exposure to professional standards (and the resources and environment are available to do so), it seems possible to maximize the benefits to students without any tradeoff of product quality.

Logisticss

Student power can probably be most easily accessed by a faculty member and most effectively harnessed through the classroom. The degree of structure and the scheduling of coursework depend on what academic objectives are to be realized, the breadth and depth of exposure to the research process students are to have, and the amount of work

(in terms of research tasks to be completed) that is to be accomplished by student power. If academic objectives are such that there is to be more than an introduction to basic methodological concepts, more than one quarter or semester may be needed. If students are to become experientially acquainted with each phase of the research process as it is undertaken, it is necessary to extend the overall time frame of coursework to a number of consecutive terms. If students are to be relied on as the work force which completes all or most research tasks (from, for instance, design to data analysis), obviously the term of their involvement must be longer than if their participation is to be limited to providing assistance for a specific task--such as coding. From both the standpoint of teaching and task completion, the authors have found that it is difficult to cover everything in two terms and certainly impossible in one. At all three schools, projects were introduced to students within the context of an established research methodology course. Projects were announced and limited activity begun (e.g., questionnaire items were developed) the first term while basic methodology coursework was emphasized. Data collection was scheduled for the following term and emphasis was shifted from theory to practice. At Northwestern and Chicago, students were enrolled in a two-course sequence, and the project directors were the faculty teaching the courses. The arrangement allowed for continuity and facilitated the integration of project activities with coursework. At Northeastern Illinois, the project director was a student, though not enrolled in any regular courses. In order to gain access to a concentrated source of student power, it was necessary to enlist the cooperation of a faculty member. The arrangement was

workable, though problematic at times since close cooperation between the project director and faculty member was necessary in order to work project activities into and around coursework planned for a one-term methodology class. Independent study, the method of mustering student researchers for data collection activities during the second term, proved to be difficult with respect to arranging common times for students to meet. Since specific hours were not arranged and published as they would have been for a regularly scheduled course, student researchers found themselves with conflicting schedules. Though many project tasks could be (and were in fact) accomplished by students working independently, there were activities such as training sessions for coding and envelope stuffing that would have been best undertaken by the group as a whole--for the sake of both efficiency and comradery. As it was, almost all instructional or informational meetings (e.g., those held to review coding procedures or those during which assignments were discussed and delegated) had to be duplicated in order that all student researchers would be able to attend.

It seems that regardless of how carefully schedules are planned, delays can be expected, should be expected and were indeed experienced at all three schools. The cause of delays may range from bureaucratic tangles to acts of God. At Northwestern, project activties were delayed while the fund-granting committee postponed consideration of the proposal. At Chicago, a delay of six weeks (out of a ten-week quarter) resulted from having to enter into lengthy negotiations with various administrators for permission to launch the project and more delays encountered in obtaining administrative approval of the final questionnaire format.

At Northeastern Illinois, weather (Chicago's Blizzard of '79) delayed project activities. The university, a commuter school, was completely closed several times early in the term during which data were collected. When school was open, getting to and from campus was difficult and at times impossible. School closings caused delay in final registration sessions, and therefore, a delay in obtaining a list of enrolled students from which the sample for the survey was to be drawn. Closings created a backlog of work in the department where questionnaire booklets were to be printed. Extremely poor travelling conditions prevented some students researchers from getting to campus to carry out their assignments and prevented an unknown number of students chosen for the sample from getting to campus to return their completed questionnaires to on-campus drop boxes.

Needless to say, delays (whatever the cause) increase levels of frustration and annoyance. Though project activities can be held in abeyance, student researchers cannot, and alternative assignments have to be made in order to salvage time that would be otherwise wasted. Therefore, flexibility tends to be an essential attribute of a project director. Delays can also lead to situations such that work has to be done under pressure. At both Northwestern and Chicago, organization of the final questionnaire was compressed into a much shorter period of time than was originally scheduled because of delays--delays in acquiring funding at Northwestern and delays in obtaining administrative approval at Chicago. At Northeastern Illinois, when questionnaires were finally printed, students worked late into the night to assemble survey packets in order to avoid further delay in mailing. Further, lack of time led to only sketchy pretesting at all three universities and to less attention

to teaching and doing analysis of the data than there should be if students indeed are to learn all aspects of the survey research methodology.

The amount of funding required for a student powered project can vary widely as can be illustrated by the total dollar amounts budgeted for each of the three projects being discussed (see Table 1). It will be noted that none of the budgets included salaries for the project directors or for computing funds. Salaries were subsumed under on-going university appointments and computer time routinely allocated for either instructional or other general university-related purposes. The Northeastern Illinois survey was definitely a bargain when compared with the Northwestern and Chicago surveys and in fact, it was a bargain considering the dollars specifically committed to the project. A comparison of costs and how

TABLE 1

COMPARISON OF PROJECT EXPENSES

	Northwestern Jniversity	Northeastern Illinois University	University of Chicago
Duplicating, printing, photocopying	$ 352.00	$ 247.00	$ 333.00
Supplies	93.00	58.00	171.00
Postage	333.00	239.00	750.00
Typing	200.00	—[a]	200.00
Data processing: Keypunching, coding, data file preparation	1,975.00	—[a]	2,355.00
Computerized literature search	315.00	—	—
Totals	$3,268.00	$ 544.00	$3,809.00

[a]Donated or absorbed.

they were met indicates that there is a distinction to be made between the amount of funding to be sought and actual project expenses. Differences in budgeted amounts for the three projects were, to a great extent, the result of how expenses were met rather than differing expenses. For instance, at Northwestern and Chicago, typing and keypunching were contracted and billed. The typing of the Northeastern Illinois questionnaire, however, was "donated" by the project director who typed it herself, and keypunching was done by the university's Computer Service department as part of the support service routinely provided to faculty and staff. The amount of funding to be sought depends not only on actual expenses to be incurred, but also on the extent to which actual expenses can be absorbed by or dissipated within the institution in one way or another. Of course, there were also differences in the actual expenses for each project which can be best illustrated by postage costs. All of the Chicago questionnaire packets were mailed first class with return-postage-paid envelopes enclosed. All Northeastern Illinois questionnaires were mailed third class and no return postage provided. Most Northwestern questionnaires were hand delivered by student researchers to the residential units of those living on campus, while questionnaires for students living off campus were mailed to them first class and return envelopes with postage provided. Differences in actual expenses were for the most part prescribed by funding rather than made by choice and can be assumed to have affected such outcomes as response rates. It would be predicted that Northeastern Illinois' response rate, which was the lowest of the three, would have been significantly better if postage could have been provided--especially since subjects were commuter students, and as it happened, were faced with very unfavorable travelling conditions at the time questionnaires were to be returned to on-campus drop boxes.

Also considered are the source of funding and the specific funding process. Though student researchers are not generally involved in fund-seeking (and were not at any of the schools being discussed), the nature as well as the level of the project directors' activities in seeking financial support can be determined by the funding process as established by the source of funds. For example, the project director may have to devote considerable time and effort to the preparation of a written proposal if the source of funds requires a formal application for consideration. In contrast, if arrangements can be made to have expenses met by simply charging them to some existing account, the project director will probably avoid proposal writing activities altogether. The source of funding, or rather the relationship of the funding source to the project, tends to have an influence beyond affecting the activities of the project director. The relationship may, for instance, have an effect on questionnaire content. If the funding source is functionally a client purchasing research services, it can be expected that questionnaire content will directly reflect the interests of the sponsor. On the other hand, if the function of the funding source is to impartially dispense research funds to applicants who meet objective criteria, it is likely that questionnaire content will be determined by those conducting the research rather than those funding it. A further discussion of funding with reference to the three universities will be included in the section on administrative sanction. Although the authors maintain that there is a distinction to be made between fund-seeking and sanction-seeking, the two activities may at times be so closely related that they can be (or must be) undertaken as a single activity.

The availability of technical support is another logistic concern. Obviously, it would be desireable to have easy access to adequate, conveniently located computer facilities when the research project involves quantitative data. This was the case at Northwestern where student researchers as well as the project director had access to keypunching equipment, computing time, and technical assistance at the university's Vogelback Computer Center. At Chicago, convenience and facilities were optimal. The project director was on the NORC staff and able to provide student researchers with direct assistance as well as facilitate their use of a major research center and its facilities. Additional facilities (e.g., terminals for interactive jobs) were widely available on the researchoriented university campus. At Northeastern Illinois, one of two computer facilities on campus able to run batch jobs (the method of data processing) had as a primary responsibility the university's administrative jobs (such as billing, registration, business office tasks). Although research related jobs could be run, administrative jobs had priority resulting in extremely long turnaround time for jobs that were non-administrative. The second major facility was for the exclusive use of computer science students, and access was generally denied to other would-be users. Since the project director at Northeastern Illinois was neither a computer science student nor running administrative jobs, she found it valuable to rely on personal relationships established throughout her years as a university employee to expedite data processing. It was possible to make special arrangements on an informal basis with Computer Services' personnel to run research project jobs between the priority administrative jobs and during offhours (at night and on weekends).

The authors, based on a comparison of their experiences, conclude that if an institution is not research oriented, or more specifically, not geared toward computer-aided research, data processing and analysis may be possible but will undoubtedly require more time and effort than at an institution where there is an emphasis on such research and, therefore, the facilities to support it optimally. Second, there are great advantages to having friends in the right places--it is sometimes possible to accomplish or expedite tasks if informal channels of communication are open and interpersonal relationships are good.

Student Power: Qualitative and Quantitative Considerations

Though the characteristics of student researchers can be expected to vary widely, the general quality of student power amassed for any given project seems to be more dependent on students' interest in the project than on academic ability, major, course preparation, or voluntary participation. At all three schools, the scholastic achievement of student researchers ranged from "average" to honors.[2] The student researchers at Northwestern and Northeastern Illinois represented a variety of majors; those at the University of Chicago were all Public Affairs majors. At Chicago, the 2-course methodology sequence during which project activities were conducted was required as part of the Public Affairs curriculum. Northwestern's 2-course sequence through which most project activities were undertaken was required for honors students, elective for others. At Northeastern Illinois, independent

[2]It should be noted that this statement is based on observations made within groups rather than across groups from the three schools. Since the Public Affairs Program and Social Sciences at the University of Chicago and Northwestern tend to attract above average students from among student bodies that are themselves considered to be above average, there must be a contextual consideration of the term "average."

studies (for which students enrolled to participate in data collection) were entirely elective. The most noticeable characteristics of each group as a whole and the characteristics which most significantly affected the quality (and to some extent the quantity) of work completed seemed to be an enthusiasm for and interest in the project. It was obvious that student researchers invested their efforts with conscientious care and that they were inclined to extend themselves in terms of the amount of work they were willing to undertake. It should be noted here, however, that as research tasks became more technical or sophisticated, the significance of students' preparation increased. For instance, student researchers were able to operate keypunch equipment after one demonstration. However, they did not have the speed and accuracy that is acquired through training and developed by experience to efficiently keypunch the thousands of cards required to create the data files for these large-scale surveys. Similarly, an introduction to methodological concepts was an adequate foundation for most data collection activities, but was not, in and of itself, adequate preparation to go beyond data collection to data analysis. Since students' skills and academic backgrounds do determine to an extent what research-related tasks they will be able to undertake, manage with competence, and complete within a prescribed period of time, a familiarity with students' preparation is important to insure the most effective project planning. With accurate information, appropriate activities can be scheduled with reasonable expectation that adherence to the schedule as planned will be possible. Without such information, one may expect that even the best laid plans will require significant alterations. As an example, the project director at Chicago had been assured that

a prerequisite for project participation was statistics, and therefore, considerable time for data analysis was planned. As it happened, however, most students did not have the background anticipated, and ultimately it was necessary to substitute assignments that did not depend on a knowledge of statistics. The authors agree that the limitations of student researchers may often not be as critical as the advanced knowledge of what the limitations are.

With regard to the quantitative aspects of student power for each of the three projects, the Northwestern "staff" was the largest (21 students); Northeastern Illinois' the smallest (9); and Chicago's of intermediate size (15 students). There is little doubt that a substantial quantity of student power can pay off in terms of expendable effort to support research activities. That the 21 Northwestern students constituted a significant power was demonstrated by an intensive and extensive personal contact follow-up effort which contributed to an impressive response rate. Northwestern students also collated and stapled over five hundred 40-page questionnaires and assembled the hundreds of survey packets for distribution in two hours time. They coded 252 of the 325 completed questionnaires that were returned as well as keypunched the 8 cards per questionnaire required for the data set. Lest one develop an unbridled enthusiasm for what can be accomplished with a large quantity of student power, however, it should be mentioned that there was a substantial effort required on the part of the Northwestern project director to coordinate the activities of 21 individuals, ensure the learning outcomes of each, and evaluate performance for final grades. In addition, all work was monitored as a quality control, and it became apparent that there was a wide range of performance, particularly with regard to keypunching. Quality varied from that which was of professional calibre to that which was so inaccurate it had to be redone.

A final consideration which affects both the quality and quantity of student power is whether or not students are "paid" for their efforts. None of the student researchers at Northwestern, Northeastern Illinois, or Chicago received monetary compensation; however, all received academic credit. At Northeastern Illinois, some project responsibilities were initially delegated to a student who, though not enrolled to receive credit for project participation, did express great interest in the venture and asked to be included in project activities. Genuine and substantial interest not withstanding, the student's other commitments eventually preempted project assignments requiring that the student researchers (enrolled for credit) and the project director assume the "volunteer's" responsibilities. It is suggested that reliance on voluntaristic student power is generally unwise and that offering some type of compensation that carries with it at least a minimum obligation is more prudent. A further benefit of credit hour compensation is that it allows project activities to become an integral part of a student's academic life rather than an extra curricular activity, which is always in danger of having to be put aside for more pressing scholastic endeavors. However, even with credit hour compensation and the integration of project activities with other academic concerns, it must be remembered that student researchers are first and foremost students and only secondarily "staff" members. They are not employees and overtime cannot be mandated. Such realities were made clear at Chicago where all coding had to be done on the NORC premises and under the direct supervision of a NORC coding supervisor. This made it necessary for students to allocate time in addition to that spent in class and to spend the time at a specified location. The

arrangement posed problems for students who had jobs, created conflicts with other classes, and interfered with daily routines such as meal schedules. Coding, because of the conditions under which it had to be done, was an activity that could not be made mandatory; and as might be predicted, the number of students participating dwindled over time. The result was that coding took considerably longer than was originally anticipated.

Administrative Sanction

Administrative sanction is always a condition of student powered research projects of universities and colleges; however, the ease with which sanction is acquired may vary. It may be quickly and easily acquired or acquired only after long, arduous negotiation. It may be acquired through the informal interaction of an individual seeker and an individual grantor or through a formal process requiring a written proposal and the review of several committees. Just as the ease with which sanction is acquired varies, so may the very nature of sanction. Sanction may be permission granted with indifference. It may be permission reticently granted with conditions imposed. It may be approval granted with some degree of encouragement offered. Sanction may be unquestioning support provided enthusiastically, without reservation or stipulation.

The nature of sanction and the ease with which it can be acquired depend on a number of variables--one of which is the institution's organizational structure. If the project is to be conducted at a large state university with a complex bureaucratic structure, the acquisition of sanction may take longer than at a small liberal arts college with a comparatively uncomplicated chain of command. In the case of the

former institution, simply determining the appropriate administrator to approach may require time and effort and even more so if there is any overlap in administrators' spheres of responsibilitiey.

The source of project funding is a variable of considerable importance. If funds are made available by the institution, one might expect the granting of administrative sanction to be part and parcel of the package, and as such, acquired with relative ease. One might also expect part and parcel of an internal funding package to be some degree of institutional control of or involvement in the project. Depending on several other variables, however, neither of the aforementioned expectations may be realized.

The nature of the research to be undertaken may affect sanction. If the study is undertaken at a college or university and the results are intended to indicate the frequency with which various facilities (such as cafeterias or tennis courts) are used, permission to conduct the study is likely to be much less difficult or time-consuming to acquire than if the study is to focus on students' use of drugs and alcohol or on their sexual behavior. A variable directly related to the nature of research is the well-being of the subjects of research. If subjects are likely to be offended or endangered in anyway, it may be expected that sanction will be difficult if not impossible to acquire. The well-being of subjects can probably be expected to be of varying importance and to depend on the relationship of the administration to the subjects and on the setting within which the relationship exists. For example, if subjects are students at a small residential college where there is a strong sense of <u>in loco parentis</u>, it is likely that administrators

will consider the research process to which their charges are exposed even more carefully than administrators at a large urban university where subjects may be students who are assumed to be both older and more cosmopolitan.

The use to which the results are to be put is another variable to be considered. If, for instance, findings are to be used as a data base for instructional purposes within the context of a classroom, permission would most probably be more easily acquired than if it were planned that results be published and widely disseminated beyond the institution.

The methodology to be used might affect the acquisition of sanction. Administrative permission would probably be more easily acquired if participant observation at the library or cafeteria were employed than if a large-scale survey utilizing a mail questionnaire were used. The more obtrusive the measure, the more lasting the evidence of any institutional association with the project, the more closely an administration might scrutinize the proposed project before granting permission.

How seriously results will have to be taken may have a considerable effect on the form of sanction and the ease with which it is acquired. Of what quality can the data be expected to be and with what confidence can that quality be predicted? One would probably not predict the quality of data yielded by a study conducted by a small group of students under the direction of another student to compare favorably with the quality of data yielded by a study conducted by a group of students under the direct guidance of a research-oriented faculty member with the support of a professional research staff. Regardless of how good

the data actually provided by the first group, it would be quite possible to dismiss research findings as amateur efforts if, for instance, they happened to prove embarrassing to the institution. On the other hand, the quality of data collected with the guidance of trained academicians and the expertise of professionals at a research center of national repute would be far more difficult to challenge or discount. The more credence research results are apt to demand (primarily because of who is directing and who is providing technical support for the project), the more difficult it might be to acquire administrative sanction--particularly if there is any possibility that results would negatively impact the institution.

Other variables entering into the equation might be whether the institution is publicly or privately funded and to whom administrators are directly accountable; how influential, how conservative alumni are; how dependent enrollment is on institutional reputation; whether or not a topic of inquiry is in vogue. It is suggested that a substantial number of variables (only some of which have been mentioned) can affect the nature of and ease with which sanction is granted and that the relevant variables are determined to a considerable extent by salient institutional characteristics. A comparison of the process of acquisition and characteristics of sanction for each of the three projects is offered to support this suggestion.

The acquisiton of sanction was directly related to funding at Northwestern and basically involved two university bodies with specific and limited functions. The Research Committee from which funding was acquired serves to initiate research efforts of the faculty, help bridge

problems encountered by faculty during the research process, and disseminate results of scholarly activities. A letter of intent, which stressed the benefits to be derived by the students involved in the project, was submitted to the Committee as a preliminary step in the process. The letter was followed by a written proposal that focused on the benefits for the research community and university from conducting a case study of this university using an omnibus survey of undergraduates. The shift in focus was due to a recognition that the Research Committee funded research, not instructional innovation. The principal concern of the second body, the Institutional Review Board, was the well-being of human subjects insofar as ensuring that the research process to which the object of the research would be exposed would be ethical, and that confidentiality and anonymity be maintained. A Human Subjects Review form as well as items to be included in the questionnaire were submitted to and cleared by the Board. Of the questionnaire items submitted, some were (or might be considered) sensitive, e.g., those relating to race relations, alcohol and drug use, and sexual behavior. However, since the items were similar to those included in other basic research projects investigating such topics, their inclusion was never questioned. Having been cleared by the Institutional Review Board and granted funds from the Research Committee, the project was begun. There was no interference from, involvement of, or control exerted by the administration over the substance of the study or the procedures used. Student researchers, for instance, launched an ambitious personal contact followup campaign to convince non-respondents to complete and return their questionnaires. Although some administrators offered suggestions during the stage of questionnaire construction and expressed a general interest in results,

they did so more in their capacity as research-oriented professionals than from their positions in the university hierarchy. The Northwestern experience was the result of the sanction- and fundgranting apparatus being a university committee with rather peripheral relationships to the university's administrative core and with an expressed purpose to facilitate and support research. Furthermore, the scope of research was very broad, did not threaten to endanger any sacred cows, and dealt with issues which (though some may have been considered sensitive) were all familiar in the context of this sort of survey.

At Northeastern Illinois, funding and sanction were also closely related, both being supplied by the Dean of the College of Arts and Sciences. Because the Dean was interested in the project in general and became even more so with the addition of questionnaire items which were of interest to him personally, he provided support beyond funding, e.g., at his request, various university offices made their services and expertise available to assist project efforts. Though the administration interfered with followup procedures as originally planned (telephoning was prohibited by the Provost's Office on the grounds that students contacted might consider the call an annoyance or intrusion on privacy), there was no other control imposed. There was widespread support offered during the course of data collection and subsequently wide-spread interest in results. The Northeastern Illinois experience seemed to result from the following conditions: the source of sanction and that of funding were one and the same; the sanction- and fund-granting source had a personal interest in the project; the scope of research was broad and generally non-sensitive (race relations and sexual behavior items were not included).

At Chicago, there was no doubt about funds being available, the support of NORC, or the cooperation of the Public Affairs Program. It was the head of the Public Affairs program who presented the idea for the project to student researchers and the project director, leaving the impression that both College and university administrators were receptive and that approval was a fait accompli. As the project director sought what was expected to be pro forma authorization to begin project activities, however, it became apparent that administrators had not as yet granted permission and in fact tended to think of the enterprise as unwise. Concern was expressed about maintaining confidentiality given that students would be surveying their peers. Worries were brought forth about the respondents being undergraduates, since they were something of a "captive audience" and the all too frequent targets of surveys. Questions were posed about the reliability and validity of results, the interpretations of the data, and the uses to which findings would be put. Project activities were delayed six weeks while the project director negotiated with various deans for permission to move ahead. Permission was finally granted contingent on the administration's final review of the questionnaire prior to distribution and an inclusion of an informed consent form, to be returned with the completed questionnaire. A further condition was imposed--that the names of students in the sample would not be known to student researchers--a condition that precluded telephone followup. The sanctioning and funding processes were not as directly related at Chicago as they were at either of the other two schools. Although funding was not problematic, the acquisition of sanction did pose difficulties--primarily because it was necessary that

administrators from several different spheres be involved. Student researchers, and perhaps more importantly, the subjects of research were undergraduates and as such the primary concern of the College. At another tier were the concerned administrators of university-wide latitude. Finally, it was necessary for both sets of administrators to deal with NORC which, though associated with the university, enjoys considerable autonomy. The sanctioning process required that all parties be satisfied. Contributing to the complications in achieving such a goal was the nature of the research coupled with its immediate supervision.

The Chicago project, more than those at Northwestern and Northeastern Illinois, was focused on "satisfaction" with the University of Chicago in general, with the College in particular, with some attention directed toward possible causes for attrition. The project was being produced and directed by a research center of national repute with a cast of professionals. If research findings promised to throw a negative light on the institution, there would be no opportunity for dismissal since results would have been acquired under the auspices of those (NORC personnel) with unquestionable qualifications and competencies.

Outcomes

There are two sorts of outcomes from student powered research: the tangible outcome of data and analysis; and the less tangible outcome of student satisfaction and learning.

In general, the surveys met the criterion of generating "real," that is usable and good quality, data. The samples were all systematic samples with a random start--probability rather than ad hoc samples. The questions, in general, were well-written. The response

rates varied across institutions: at Northwestern it was 51.3 percent for the black subsample and 66.1 percent for the white subsample; at Northeastern Illinois, it was 40 percent; and at Chicago, it was 57.9 percent for enrolled students and 34.8 percent for the students who had withdrawn. As mentioned, the differences in the response rates reflect to some extent the differences in the conditions under which the surveys were carried out. Although they seem low and were a cause of concern to some students, they are not lower than would be expected given the design of the surveys.[3] Despite concern that the format of the Northwestern questionnaire would result in fewer usable responses, a comparison of returns from the Chicago and Northwestern surveys did not support this: Returned questionnaires at Northwestern did not seem to have a greater number of out of range or missing responses as compared with the Chicago completed questionnaires. Coding, keypunching and cleaning were all painstakingly supervised so that errors creeping in at these stages of data preparation were, if anything, less frequent than in the usual survey research project. All in all, the data generated by these student-powered projects hold their own in comparison with data from surveys powered in other ways.

The analysis, on the other hand, tended to suffer because of time pressures. In all three cases, the analysis part of the project spilled over into the following terms, which meant that students tended

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[3]The Northwestern response rate, for example, is the same as the mean for a range of surveys analyzed by Heberlein and Baumgartner (1978), although less than Heberlein and Baumgartner (Table 4) would predict on the basis of population, number of and type of followups, salience of the topic, and length of questionnaire. Northeastern Illinois' response rate is only slightly lower than this equation would predict (perhaps reflecting the looseness of the return procedures). The Chicago response rate for on campus students is actually slightly higher than expected, despite the use of an informed consent form, which would tend to depress responses (Singer, 1978).

to be less well supervised at this stage. This emphasizes the need to give students prior preparation in data analysis and to be prepared to make trade-offs in what can be taught. However, at both Chicago and Northeastern Illinois, later analysis was done to inform directly university policy makers. At Chicago, a group of students later gave a presentation to the Deans of Students in the College and the University on the results of the project, and one student from the class was hired by one of the Deans to carry out for him further analysis. At Northeastern Illinois, Singleton wrote a report to the Dean of Arts and Sciences, gave marginals to the University's Self-Study Committee (which was preparing for an accreditation visit), and shared answers to open-ended responses regarding the experiences of returning students with the Programs on Returning Adult Students. At Northwestern, Suelzle later used the data in teaching secondary analysis for later methodology students, and other professors and students used the data in substantive courses and papers.

Our general impression is that students did enjoy and learn from this type of project. Working in teams at times to meet deadlines fostered more cooperation and social interaction than is usual in classes.[4] At times, the work periods themselves resembled a party, and at Chicago a party for class members was organized for the following fall. At Chicago and Northwestern, students expressed an appreciation for doing "real" work, rather than simply course work. At Chicago, for example,

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[4]See Leming, 1979, for an example of the extent to which students are unaccustomed to think in terms of cooperative effort, as well as for a suggestion on how to encourage cooperation.

any course involving manual tasks such as stuffing envelopes is a novelty. Students did ask along the way whether these data would be worth analyzing, giving voice to their concern that this be an example of a "real" survey. At Northeastern Illinois, there was a similar sentiment, but there (where a large proportion of students are employed off-campus), the appreciation seemed to be for doing real research as compared with simply taking in what a lecturer offered.

Our impression is that students, through responsible participation in all stages of the surveys, gained a better grasp than otherwise of the concepts of reliability and validity, of operationalization of sociological concepts, of sampling, and of constraints on research. At the same time, at least some of them learned about the politics surrounding even seemingly innocuous research projects. Further, some of the specific skills they learned are relevant to jobs, beyond the classroom (e.g., questionnaire design and use of computer software). At Chicago, for example, one student was able to carry out a complete telephone survey for an energy company on a job he held after taking the course. At Northwestern, the usefulness of the course has been recognized in the form of it being strongly recommended to students in the more applied fields of journalism, social policy and human development. As Rippetoe (1977) emphasizes, offering education that has some practical relevance is necessary not only in order to keep up enrollments, but also to be responsible to the majority of sociology students who do not go on to graduate studies.

Conclusions

Regardless of what the ultimate goal of the project is to be (e.g., the creation of a dataset for use in other classes, substantive research papers, data to inform policy decisions), a student powered project requires a commitment of a substantial amount of time and energy. Though the required hours in a day, days in a week, and months in a year will vary with such conditions as the quality and quantity of student power, the scope and method of research, the size of the sample, and unanticipated problems, there must be no doubt that student projects require far more time than other methods of teaching or other means of acquiring a research staff. An inherent characteristic of student power is a void to be filled by the learning experience. Students are not professionals (although with time and with attention, their performance can suggest otherwise). Time and effort are necessary. The authors recommend that at least two consecutive terms be planned for these projects and offer Figures 2, 3, and 4 to illustrate how each of the project's activities were scheduled within the context of the academic calendar.

Though it is possible to compensate for a limited budget, there are minimum resources that must be available. Though corners can be cut and lack of ideal resources be countered by improvization and/or the sweat of someone's brow, there is a lower limit of resources that (as it is approached) should begin to warn against undertaking a specific project. In other words, there is a critical level of resources without which one cannot hope to succeed. If a mail questionnaire is to be utilized, for instance, resources for postage must be adequate. If resources are inadequate, thought must be given to either abandoning the project or altering methods to be used.

Summer, 1976

Conceptualization of project by project director.

Fall, 1976 Quarter

Funding sought by project director (proposal written and submitted).
Data analysis by student researchers of previous studies.
Funding granted by university Research Committee.

Winter, 1977 Quarter

Questionnaire items developed.
Questionnaire items critiqued.
Item selection made.
Questionnaire layout by project director.
Questionnaire pages typed and printed by university services.
Questionnaires collated and stapled.
Press release in campus newspaper announcing forthcoming survey.
Sample drawn from computer list of enrolled students.
Questionnaire packets delivered to on-campus students.
Questionnaire packets mailed to off-campus students.
Followup efforts undertaken (personal contact, telephoning).
Review of coding procedures with student researchers.
Coding.
Keypunching of survey records.
Keypunching of questionnaire data.

Spring, 1977 Quarter

Followup letter and 2nd questionnaire sent to non-respondents by project director.
Manual verification of coding and keypunching by project director and research assistant.
SPSS file defined by research assistant.

Summer, 1977 Quarter

Data cleaned by project director and research assistant.

Fig. 2.--Project activities by term: Northwestern University

Summer, 1978

Conceptualization of project by project director.
Funding sought informally and acquired.

Fall, 1978 Trimester

Preparation of pretest by project director.
Informal pretest of questionnaire.
Review of coding procedures with student researchers.
Coding of pretest
Construction of questionnaire by project director.
Typing of questionnaire by project director
Press release in campus newspaper announcing forthcoming survey.

Winter, 1979 Trimester

Printing of questionnaire by university services.
Sample drawn from computer list of enrolled students.
Questionnaire packets mailed.
Weekly announcements of project progress in campus newspaper.
Coding procedures reviewed with student researchers.
Daily questionnaire retrieval from on-campus drop boxes.
Coding.
Coding checked by project director.
Followup postcards mailed.
Keypunching of survey records.

Spring-Summer, 1979 Trimester

Keypunching of questionnaire data by university services.
SPSS file created by project director.
Data cleaned by project director.

Fig. 3.--Project activities by term: Northeastern Illinois University

Fall, 1978 Quarter

Conceptualization of project by Public Affairs and NORC.

Winter, 1979 Quarter

Negotiation for administrative approval.
Review of previous studies.
Open-ended interviews conducted with members of the university community.
Confirmation of funding from NORC.
Administrative approval granted with conditions.
Questionnaire items developed.
Press release in campus newspaper announcing forthcoming survey.

Spring, 1979 Quarter

Final selection of questionnaire items.
Construction of questionnaire by NORC staff.
Informal pretest of questionnaire.
Consent forms sent by Dean of Students to "withdrawn" student subsample.
Review of final questionnaire by administrators.
Typing and printing of questionnaire by NORC staff.
Sample drawn from computer list of enrolled students.
Survey packets mailed to enrolled students.
Survey packets mailed to "withdrawn" students subsample by Dean.
Followup letter and 2nd questionnaire sent to enrolled students.
Followup letter and 2nd questionnaire sent to "withdrawn" students subsample by Dean.
Review of coding procedures with student researchers.
Coding.
Keypunching of questionnaire data by NORC staff.
SCSS file defined by research assistant.
Data cleaned by NORC data processing personnel.

Summer and Fall, 1979

Analysis and report writing.

Fig. 4.—Project activities by term: University of Chicago

Although the energy and organization required for student-powered research can be greater than for a regular course or for student-aided research, the benefits are many. For the student they include a chance for learning teamwork and for social interaction with their peers, for becoming more involved in the learning process, for learning experientially the nature of the field--how at least some forms of sociological research look from the point of view of their practitioners--and for gaining job-relevant skills. For faculty and other "principal investigators," in these time of diminishing funds for research, student-powered research can represent a way of doing projects that otherwise would not be done. Further, when the subject of the research is the institution within which the research is carried out, the administration of the institution can gain valuable information about the student body. Finally, while time consuming and often frustrating, student-powered research can also be fun for all of those involved.

REFERENCES

Babbie, Earl R.
1973 Survey Research Methods. Belmont, CA: Wadsworth.

Clifton, A. Kay
1976 "Doin Soc: An evaluation of actively involving students in the work of sociology." Teaching Sociology 3 (Jan):138-47.

Gamson, William A.
1978 SIMSOC: Simulated Society (3rd ed.) New York: The Free Press.

Hammond, Phillip (ed)
1964 Sociologists at Work. New York: Basic Books.

Heberlein, Thomas and Robert Baumgartner
1978 "Factors affecting response rates to mailed questionnaires: A quantitative analysis of the published literature." American Sociological Review 43 (August):447-62.

Leming, Michael R.
1979 "Research methods: The first class." Teaching Sociology 6 (Jan.):133-37.

Rippetoe, Joseph K.
1977 "The undergraduate education in sociology: A case for experimental learning." Teaching Sociology 4 (April):239-50.

Singer, Eleanor
1978 "Informed consent: Consequences for response rate and response quality in social surveys." American Sociological Review 43 (April):144-162.

Straus, M.S. and J. I. Nelson
1968 Sociological Analysis: An Empirical Approach Through Replication. New York: Harper and Row.

Suelzle, Marijean, Rachel Rosenfeld and Melody Singleton
1980 "Experiential approaches to teaching survey research: Role strains and relationships." Paper presented at the Society for the Study of Social Problems annual meeting, New York, August 25.

Wiseman, J.P. and M.S. Aron
1970 Field Projects for Sociology Students. San Francisco: Schenkman.